

## **REMARKS**

### **I. Introduction**

Claims 1-17 are pending in the application. In the Office Action dated Aug. 1, 2008, the Examiner rejected claims 1-3, 6, 7, 11-13, and 16 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,544,250 ("Urbanski") in view of U.S. Pat. No. 6,563,931 ("Soli"); rejected claims 4, 5, 8, and 9 under 35 U.S.C. § 103(a) as being unpatentable over Urbanski in view of Soli and U.S. Pat. No. 4,420,655 ("Suzuki"); rejected claims 10, 14, and 15 under 35 U.S.C. § 103(a) as being unpatentable over Urbanski in view of Soli, and U.S. Pat. No. 5,937,070 ("Todter"). In this Amendment, Applicants have amended claims 1, 5, 7, and 10, and cancelled claims 4, 6, and 12.

### **II. The Proposed Combination Does Not Render Claim 1 Unpatentable**

Amended independent claim 1 generally recites received-speech clarifying means for adjusting a gain for a received-speech signal to be output by a speaker based on a power level of background sound measured by background sound level measurement means, where the received speech signal to be output by the speaker is not received at a microphone of the speech communication apparatus. Accordingly, in amended claim 1, a gain of a first signal that is not received at a microphone of a speech communication apparatus (the received-speech signal to be output by a speaker) is adjusted based on a power level of background noise extracted from a signal that is received at a microphone of the speech communication apparatus (the output signal from a microphone). The proposed combination of Urbanski and Soli fail to teach this element.

Urbanski is directed to a noise suppression system and method therefore. As acknowledged by the Examiner, the portions of the disclosure of Urbanski that were cited by the Examiner teach adjusting a level of a signal based on noise that is detected in that same signal. In an effort to cure the deficiencies of Urbanski, the Examiner proposes combining Urbanski with Soli. Soli is directed to an auditory prosthesis for adaptively filtering selected auditory components by user activation and a method for doing the same. The cited portions of Soli teach the use of a microphone that is able to output a primary input signal and a noise reference signal. The primary input signal

may then be adjusted based on the noise reference signal. The portions of Urbanski and Soli cited by the Examiner both fail to teach adjusting a gain of a first signal that is not received at a microphone of a speech communication apparatus based on a power level of background noise extracted from a signal that is received at a microphone of the speech communication apparatus. In Soli, a primary signal received at a microphone is adjusted based on a noise reference signal received at that same microphone, and in Urbanski, a signal is adjusted based on noise detected in that same signal.

The proposed combinations of Urbanski and Soli fail to teach received-speech clarifying means for adjusting a gain for a received-speech signal to be output by a speaker based on a power level of background sound measured by background sound level measurement means, where the received speech signal to be output by the speaker is not received at a microphone of the speech communication apparatus. For at least this reason, the proposed combination of Urbanski, Soli, and Suzuki do not render independent claim 1, or any claim that depends on claim 1, unpatentable.

### **III. The Proposed Combinations Do Not Render Claims 8, 10, and 14 Unpatentable**

Claim 8 generally recites a received speech clarifying filter operable to adjust a gain for received speech to be output by a speaker based on a background sound level, where a background sound level calculator calculates the background sound level from a signal output from a background sound microphone and the received speech to be output by a speaker is not received at a microphone of the speech communication apparatus.

Claim 10 generally recites received-speech clarifying means for adjusting a gain for received speech that is output from a speaker based on a power level of background sound measured by a background sound level measurement means, where the background sound level measurement means measure the power level of background sound by subtracting a power level of an output of the pseudo-proximity-effect filter from a power of an output of a background sound microphone of the speech communication apparatus.

Claim 14 recites a received-speech clarifying section operable to adjust a gain for received speech to be outputted by a speaker based on a level of background sound measured by a background sound level measurement calculator, where the background sound level measurement calculator measures the level of background sound based on the output signals from first and second background-sound microphones and the received speech to be output by a speaker is not received at a microphone of the speech communication apparatus.


Thus, in each of claims 8, 10, and 14, a gain of a first signal that is not received at a microphone of a speech communication apparatus (the received-speech signal) is adjusted based on background noise extracted from one or more additional signals that are received at a microphone of the speech communication apparatus. As discussed above in conjunction with claim 1, the Examiner's proposed combination of Urbanski and Soli fail to teach this element.

Because the proposed combination of Urbanski and Soli fail to teach the above-recited elements of claims 8, 10, and 14 as asserted by the Examiner, the proposed combinations of Urbanski, Soli, Suzuki, and Todter do not render independent claims 8, 10, and 14, or any claim that depends on claims 8, 10, or 14, unpatentable.

#### **IV. Conclusion**

In view of the foregoing remarks, Applicants submit that the pending claims are in condition for allowance. Reconsideration is therefore respectfully requested. If there are any questions concerning this Response, the Examiner is asked to phone the undersigned attorney at (312) 321-4200.

Respectfully submitted,

  
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